

Appl. No. 09/872,645
Docket No: 17400US02
Resp. dtd. June 8, 2006
Reply to Office action of Feb. 8, 2006

REMARKS

Claims 4, 13, 22, 28-30, 34, 40-42, 45, 52 and 58-62 were pending in the present application at the time of the Office Action.

Claims 4, 13, 22, 34, 45, 52 and 58-62 stand allowed.

Claims 28 and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,772,391 to Shin ("*Shin*") in view of United States Patent No. 6,987,543 to Mogre et al. ("*Mogre*").

Claims 29-30 and 41-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shin* in view of *Mogre* and in view of admitted prior art.

This amendment adds new claims 63-96.

For at least the reasons stated below, the Applicant respectfully traverses the above rejections and submits that claims 4, 13, 22, 28-30, 34, 40-42, 45, 52, and 58-96 are allowable.

Turning first to the rejection of independent claim 28 under 35 U.S.C. § 103(a) as being unpatentable over *Shin* in view of *Mogre*, the Applicant respectfully traverses this rejection.

MPEP § 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all of the claim limitations. MPEP § 2143.03 states that to establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Independent claim 28, as currently amended, states "an interface configured to couple an input of at least one of the plurality of stored state bits into the state machine during a time period." Independent claim 40, as currently amended, states "transmit control means for controlling the interface means to couple the input of at least one of the plurality of stored state bits into the state generation means during the time period" (emphasis added).

Shin does not appear to show such inputting of stored state bit(s). Additionally, *Mogre* does not cure this deficiency of *Shin*.

Accordingly, based at least on the foregoing, and according to the requirements of MPEP §§ 2142 and 2143.03, the Applicant respectfully submits that the Office Action has not presented

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a *prima facie* case of obviousness for claims 28 and 40, as presently amended. The Applicant submits that independent claims 28 and 40, as presently amended, are allowable over *Shin* in view of *Mogre*, as are all claims depending from claims 28 and 40, including claims 29-30 and 41-42.

The Office Action includes various statements concerning former claims 28-30 and 40-42 and various references, which are moot in light of the above comments. Accordingly, the present response does not address such statements. The Applicant neither agrees nor disagrees with such statements and expressly reserves the right to challenge such statements in the future should the need arise.

Turning next to new claims 63-68, such claims are similar to original claims 2 and 5-9, and each of such claims depend directly or indirectly from independent claim 4, which has been allowed. Accordingly, the Applicant submits that new claims 63-68 are allowable.

Turning next to new claims 69-74, such claims are similar to original claims 11 and 14-18, and each of such claims depend directly or indirectly from independent claim 13, which has been allowed. Accordingly, the Applicant submits that new claims 69-74 are allowable.

Turning next to new claims 75-80, such claims are similar to original claims 20 and 23-27, and each of such claims depend directly or indirectly from independent claim 22, which has been allowed. Accordingly, the Applicant submits that new claims 69-74 are allowable.

Turning next to new claims 81-86, such claims are similar to original claims 32 and 35-39, and each of such claims depend directly or indirectly from independent claim 34, which has been allowed. Accordingly, the Applicant submits that new claims 81-86 are allowable.

Turning next to new claims 87-89, such claims are similar to original claims 47-49, and each of such claims depend directly or indirectly from independent claim 45, which has been allowed. Accordingly, the Applicant submits that new claims 87-89 are allowable.

Turning next to new claims 90-92, such claims are similar to original claims 53-55, and each of such claims depend directly or indirectly from independent claim 52, which has been allowed. Accordingly, the Applicant submits that new claims 90-92 are allowable.

Turning next to new claim 93, the Applicant submits that such claim is allowable. For example and without limitation, claim 93 states that the encoder comprises "an interface

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configured to couple an input representative of the most significant bit into the state machine during a time period." *Shin* and *Mogre* do not appear to disclose such an interface. Accordingly, for at least this reason, the Applicant submits that claim 93 is allowable over *Shin* and *Mogre*, independently or in combination, as are all claims depending from claim 93, including new claim 94.

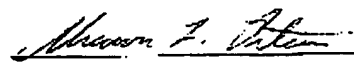
Turning next to new claim 95, the Applicant submits that such claim is allowable. For example and without limitation, claim 95 states that the encoder comprises "an interface configured to couple a plurality of inputs corresponding to the first plurality of state bits into the state machine during a time period." *Shin* and *Mogre* do not appear to disclose such an interface. Accordingly, for at least this reason, the Applicant submits that claim 95 is allowable over *Shin* and *Mogre*, independently or in combination, as are all claims depending from claim 95, including new claim 96.

Based on at least the foregoing, the Applicant believes that claims 4, 13, 22, 28-30, 34, 40-42, 45, 52 and 58-96 are in condition for allowance. Accordingly, the Applicant courteously solicits a Notice of Allowability with respect to all pending claims. If the Examiner disagrees or has questions regarding this submission, the Applicant respectfully requests that the Examiner telephone the undersigned at 312-775-8000.

The Commissioner is hereby authorized to charge additional fee(s) or credit overpayment(s) to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,


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